activation of cyclin E-Cdk2 complex in the hyperproliferative cells of the subject, so as to thereby treat the subject.

24. The method of claim 23, wherein the subject is a human.

25. (**Amended**) The method of claim 23, wherein the hyperproliferative disorder is selected from cancer and hyperplasia.

26. (**Amended**) A method of treating a subject having a hypoproliferative disorder which comprises administering to the subject a therapeutically effective amount of an agent capable of specifically inhibiting the ability of a p27 protein comprising a sequence at least 90% identical to amino acid residues 28-88 of SEQ ID NO: 2 to inhibit the activation of cyclin E-Cdk2 complex in the hypoproliferative cells of the subject, so as to thereby treat the subject.

27. The method of claim 26, wherein the subject is a human.

28. The method of claim 26, wherein the hypoproliferative disorder is an ulcer.

32. (**Amended**) A pharmaceutical composition which comprises an effective amount of a recombinant virus capable of infecting a suitable host cell, said recombinant virus comprising a nucleic acid molecule that encodes a polypeptide comprising a sequence at least 90% identical to amino acid residues 28-88 of SEQ ID NO: 2 and capable of binding to and inhibiting the activation of a cyclin E-Cdk2 complex, and a pharmaceutically acceptable carrier.

33. (**Amended**) A method for treating a subject suffering from a hyperproliferative disorder associated with the presence of a p27 protein mutation in the cells of the subject, which comprises administering to the subject an amount of recombinant virus comprising a nucleic acid molecule that encodes a polypeptide comprising a sequence at least 90% identical to amino acid residues 28-88 of SEQ ID NO: 2, wherein the polypeptide is

capable of binding to and inhibiting the activation of a cyclin E-Cdk2 complex, and effective to treat the subject.

34. The method of claim 33, wherein the subject is a human.

35. The method of claim 33, wherein the hyperproliferative disorder is cancer.

Please add these new claims:

36. (**New**) The pharmaceutical composition of claim 32, wherein the polypeptide comprises a sequence identical to amino acid residues 28-88 of SEQ ID NO: 2, 4 or 6.

37. (**New**) The pharmaceutical composition of claim 36, wherein the polypeptide comprises a sequence identical to SEQ ID NO: 2, 4 or 6.

38. (**New**) The pharmaceutical composition of any of claims 32 and 36-37, wherein the polypeptide is of human origin.

39. (**New**) The pharmaceutical composition of any of claims 32 and 36-37, wherein the recombinant virus is selected from papilloma virus, polyoma virus, adenovirus, vaccinia virus, baculovirus, retrovirus, Semliki Forest virus, and SV40 virus.

40. (**New**) The pharmaceutical composition of claim 32, wherein the host cell is a mammalian cell.

41. (**New**) The pharmaceutical composition of claim 40, wherein the host cell is a human cell.

42. (**New**) The method of claim 33, wherein the polypeptide comprises a sequence identical to amino acid residues 28-88 of SEQ ID NO: 2, 4 or 6.

43. (**New**) The method of claim 42, wherein the polypeptide comprises a sequence identical to SEQ ID NO: 2, 4 or 6.

44. (**New**) The method of any of claims 33 and 42-43, wherein the polypeptide is of human origin.

45. (**New**) The method of any of claims 33 and 42-43, wherein the recombinant virus is selected from papilloma virus, polyoma virus, adenovirus, vaccinia virus, baculovirus, retrovirus, Semliki Forest virus, and SV40 virus.

46. (**New**) The method of any of claims 33-35, wherein the p27 protein mutation results in reduced expression of a p27 protein.

47. (**New**) The method of any of claims 33-35, wherein the p27 protein mutation results in reduced ability of a p27 protein to bind to or inhibit the activation of a cyclin E-Cdk2 complex.

The claims presented above incorporate changes as indicated by the marked-up versions below.

23. (**Amended**) A method of treating a subject having a [hyperprolifera-tive] hyperproliferative disorder which comprises administering to the subject a therapeutically effective amount of an agent capable of specifically enhancing the ability of a p27 protein comprising a sequence at least 90% identical to amino acid residues 28-88 of SEQ ID NO: 2 to inhibit the activation of cyclin E-Cdk2 complex in the hyperproliferative cells of the subject, so as to thereby treat the subject.

25. (**Amended**) The method of claim 23, wherein the hyperproliferative disorder is selected from [the group consisting of] cancer and hyperplasia.

26. (**Amended**) A method of treating a subject having a [hypoprolifera-tive] hypoproliferative disorder which comprises administering to the subject a therapeutically effective amount of an agent capable of specifically inhibiting the ability of a p27 protein comprising a sequence at least 90% identical to amino acid residues 28-88 of SEQ ID NO: 2 to inhibit the activation of cyclin E-Cdk2 complex in the hypoproliferative cells of the subject, so as to thereby treat the subject.

32. (**Amended**) A pharmaceutical composition which comprises an effective amount of a recombinant virus capable of infecting a suitable host cell, said recombinant virus comprising [the] a nucleic acid molecule [of claim 2] that encodes a polypeptide comprising a sequence at least 90% identical to amino acid residues 28-88 of SEQ ID NO: 2 and capable of binding to and inhibiting the activation of a cyclin E-Cdk2 complex, and a pharmaceutically acceptable carrier.

33. (**Amended**) A method for treating a subject suffering from a hyperproliferative disorder associated with the presence of a p27 protein mutation in the cells of the subject, which comprises administering to the subject an amount of [the pharmaceutical composition of claim 32] recombinant virus comprising a nucleic acid molecule that encodes a polypeptide comprising a sequence at least 90% identical to amino acid residues 28-88 of SEQ ID NO: 2, wherein the polypeptide is capable of binding to and inhibiting the activation of a cyclin E-Cdk2 complex, and effective to treat the subject.

REMARKS

The specification has been amended to include a sequence identifier number next to each sequence when such sequence is first mentioned in the specification.

Applicants have amended claims 23, 25-26, and 32-33, and added new claims 36-47. Claims 32-33 have been re-written into independent form. Applicants submit all amendments are fully supported by original claims as well as the original specification.

In reply to the outstanding Restriction Requirement, mailed October 1, 2002, in connection with the above application, Applicants hereby elect, with traverse, Group VI (claims